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09/229,046	01/12/1999	MICHAEL G. COUTTS	7890	7721

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EXAMINER	
TSEGAYE, SABA	

ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/229,046	COUTTS ET AL.	
	Examiner	Art Unit	
	Saba Tsegaye	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11,12,32-34,74,81,83-90,95,98-103,105-114,119-140 and 148-179* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11,12,32-34,74,81,83-90,95,98-103,105-114,119-140 and 148-179* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *05/07/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to the amendment filed on 03/14/05. Claims 11, 12, 32-34, 74, 81, 83-90, 95, 98-103, 105-114, 119-140, and 148-179 are pending. Currently no claims are in condition for allowance.

Claim Rejections - 35 USC § 112

2. Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11, line 12, it is not clear whether "a malfunction" refers to the same malfunction cited in line 8.

Claim Rejections - 35 USC § 102

3. Claims 157, 158, 171, 172 and 176 are rejected under 35 U.S.C. 102(e) as being anticipated by Drummond et al. (US 6,505,177).

Regarding claims **157, 171 and 176,** Drummond discloses a method of operating a server system and associated ATMs comprising:

a) sending a first type of intelligent agent from a server to a group of ATMs, which agent obtains diagnostic information from the ATM (column 11, lines 11-27; column 12, lines 21-32);

b) sending a second type of intelligent agent from a server to a group of ATMs, which agent informs the ATMs of the identities of available service technicians; (column 11,

lines 11-27; in addition Drummond discloses that fault messages which indicate a need for servicing may be directed to an address associated with an entity who can provide the type of servicing required; this shows that the identities of service provider (technician) is known) and

c) sending a third type of intelligent agent from a malfunctioning ATM to a service technician, wherein all intelligent agents share a common data format (column 28, lines 59-65).

Regarding claims **158, 172**, Drummond discloses a method wherein the first type of agent returns to the server, and delivers the diagnostic information to the server upon return (column 12, lines 33-45).

Claim Rejections - 35 USC § 103

4. Claims 74, 81, 83-86, 95, 98-101, 106-110, 113, 114, 128, 131, 148-154,162-168, 178 and 179 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond.

Regarding claims **74, 81, 83-85, 95, 98-101, 110 and 113**, Drummond discloses a method of servicing an electronic device interconnected over a network that includes storing in the device a network address of an authorized service representative, to enable notification to be sent to the service representative in the event of a designated operating condition **(fault messages which indicate a need for servicing is directed to an address associated with an entity who can provide the type of servicing required/notify appropriate personnel**; col. 28, line 46-col.29, line 5). Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. **E-mail or similar messages**

are sent to a **selected address** whenever a particular condition or group of conditions exists. Referring to col. 28, lines 45-67, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider).

Drummond does not expressly disclose informing the device when the representative becomes otherwise unavailable or available (or not accept responsibility) to perform required services.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies a device when a representative becomes otherwise unavailable or available to the method of Drummond. The motivation/suggestion would have been that Drummond discloses that the server handling status and fault messages may also be configured to send **e-mail or similar messages** to a fault handling system and notify appropriate personnel of the corrective action to be taken. Therefore, it is possible for the service person to decide whether or not to accept responsibility when he/she receives the messages. Doing so would allow resolving the nature of the fault promptly or sending messages promptly to other available representatives.

Regarding claim **86**, Drummond discloses all the claim limitations as stated above. Further Drummond discloses fault messages, which indicate a need for servicing may be directed to an address associated with an entity who can provide (particular servicing person's terminal; for e.g. that replenishes currency or replenishes supplies) the type of servicing required (column

28, lines 54-59). Drummond does not expressly disclose that the intelligent agent program is transmitted to a particular servicing person's terminal as determined by a prioritized list of terminal to visit maintained by the program.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's apparatus to cause the intelligent agent program is transmitted to a particular servicing person's terminal as determined by a prioritized list of terminal to visit maintained by the program. The suggestion/motivation would have been that Drummond discloses that fault messages may be selectively directed based on the nature of the fault indicated. Messages may indicate that devices are not functioning properly. Moreover, from plurality of devices, messages may indicate that supplies of paper for printers or currency are low or are depleted (for example, such as devices which are not functioning properly has priority than devices with low currency). Therefore, to transmit the intelligent agent program to a particular servicing person's terminal as determined by a prioritized list of terminal to visit maintained by the program would be beneficial to provide services according their need and urgencies.

Regarding claims **106 and 107**, Drummond does not expressly disclose notifying terminal element when servicing person has serviced the error condition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that notifies a device when a servicing person has serviced the error condition to the method of Drummond. The motivation/suggestion would have been that Drummond discloses that the server handling status and fault messages may also be configured

to send **e-mail or similar messages** to a fault handling system and notify appropriate personnel of the corrective action to be taken. Therefore, it is possible for the service person to notify terminal element when servicing person has serviced the error condition. Doing so would allow the transaction terminal to be appropriately updated and to be ready for the next transaction.

Regarding claims **108, 109 and 114**, Drummond discloses all the claim limitation as stated above. Further, Drummond discloses that a fault messages which indicate a need for servicing may be directed to an address associated with an entity who can provide the type of servicing required. Drummond does not expressly disclose that the transaction terminal element launches a second intelligent agent program if the first one does not return within an allotted time period.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that launches a second intelligent agent program if the first one does not return within an allotted time period to the method of Drummond. The motivation/suggestion would have been that Drummond discloses that the server handling status and fault messages may also be configured to send **e-mail or similar messages** to a fault handling system and notify appropriate personnel of the corrective action to be taken. If the first message does not return within an allotted time period, it would have been obvious to one of ordinary skill in the art to send a second message. Doing so would provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

Regarding claim **128 and 131**, Drummond discloses all the claim limitations as stated above. Further, Drummond discloses that server 90 may deliver documents (such as messages or material tailored) selectively to the ATMs 12 connected to the intranet 16. The material or messages could include advertising for various products or services. Drummond does not expressly disclose that the central server notifies the transaction terminal element as to prioritization data associated with the corresponding servicing person potentially available for servicing the transaction terminal.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a system that notifies the transaction terminal element as to prioritization data associated with the corresponding servicing person to the system (that downloads documents such as advertising) of Drummond. One would have been motivated to do this because end users will save time to locate service providers according to their availability, skills and quality of service.

Regarding claims **148**, Drummond discloses, in Fig. 1, a method of operating a server system associated ATMs (12), comprising:

using the server system to deliver (14, 92), to a monitor intelligent agent (servers 20, 22, 24, 26 28), monitor agent,

a diagnostic computer program (column 29, lines 6-8, lines 45-62); causing the monitor agent to visit the ATMs; deliver the diagnostic computer program to the ATM (column 29, lines 9-23); receive and store results of the diagnostic computer programs after the ATM runs the program and return to the server (column 29, lines 9-23;lines 50-59). Further, Drummond

discloses that the device status information for one or more devices may be represented by indicia contained within a data object. Drummond discloses that fault messages, from a plurality of ATMs, selectively directed (device server 92 may direct fault messages) based on the nature of the fault indicated to a service provider (a plurality of fault messages from a plurality of ATMs may be directed to a particular service provider). However, Drummond does not expressly disclose causing the monitor agent to visit the ATMs on the list in sequence.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's apparatus to cause the monitor Agent to visit the ATMs on the list in sequence. The suggestion/motivation would have been that Drummond discloses "fault messages indicative of a need to replenish currency or supplies may be directed to an address in the intranet associated with an entity who has responsibility for replenishing supplies"; this shows that a need to replenish currency or supplies may be needed at the same time, from a particular ATM or plurality of ATMs. Therefore, visiting the ATMs on the list in sequence would be beneficial to provide a communication by which the number of messages could be reduced and customer satisfaction improved.

Regarding claims **149, 150, 152, 154, 162, 163, 164, 166, 168, 178 and 179** Drummond discloses a method of operating a server system and associated Automated Teller Machines, comprising:

a) using the server system to deliver (14, 92), to a monitor intelligent, monitor agent,

a diagnostic computer program (column 9, line 48-column 10, line 19; column 29, lines 6-31); b) causing the monitor agent to visit the ATMs (column 29, lines 35-49); deliver the

diagnostic computer program to the ATM (column 29, lines 50-59); receive and store results of the diagnostic computer programs after the ATM runs the program and return to the server (columns 29-30); wherein the monitor Agent comprises a data packet, having a format which includes; sender' network address, addresses of the ATMs to be visited (the intranet and the internet communicates using messages in the TCP/IP format; and TCP/IP message includes senders and receivers addresses), the diagnostic program (HTML documents and HTTP messages), and a register to contain data obtained from the ATM (the HTTP server 90 may deliver documents (that includes **services** or other material) selectively to the ATMs); c) using the server to deliver, to service intelligent agent, service agent, names of human service technicians, and technical abilities to the service technicians (the mini-HTTP server handling status and fault messages may also be configured **to send an e-mail or similar message to a selected address** whenever a particular condition or group of conditions exist. Fault messages may be selectively directed to an address associated with an entity who can provide the type of servicing required); d) causing the service agent to visit the ATMs, at each ATM, deliver, the names of the human service technicians and the technical abilities of the service technicians (server 90 may deliver documents selectively to the ATMs 12; messages could include advertising for services); e) at an ATM, detecting an error condition; examining the abilities of human service technicians and selecting a technician to handle the error condition; and delivering to an alert intelligent agent, Alert Agent, an address of the technician selected, and causing the Alert Agent to contact the technician selected (column 28, lines 45-62). Further, Drummond discloses that the device status information for one or more devices may be represented by indicia contained within a data object. Drummond discloses that fault messages,

from a plurality of ATMs, selectively directed (device server 92 may direct fault messages) based on the nature of the fault indicated to a service provider (a plurality of fault messages from a plurality of ATMs may be directed to **a particular service provider**). However, Drummond does not expressly disclose: delivering a list of ATMs and causing the monitor agent to visit the ATMs on the list in sequence.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's apparatus to deliver a list of ATMs and to cause the monitor Agent to visit the ATMs on the list in sequence. The suggestion/motivation would have been that Drummond discloses pluralities of ATMs are connected to a computer system. From each ATM, fault messages indicative of a need to replenish currency or supplies may be directed to an address in the intranet associated with an entity who can provide the type of servicing required or who has **responsibility** for replenishing supplies. This shows that a need to replenish currency or supplies may be needed at the same time, from a particular ATM or plurality of ATMs. Therefore, visiting the ATMs on the list in sequence would be beneficial to provide a communication by which the number of messages could be reduced and customer satisfaction improved.

Regarding claims **151 and 165**, Drummond discloses a method wherein the format of the Monitor Agent is the same as that of the Service Agent (messages that are communicated through the intranet and internet are TCP/IP messages).

Regarding claims **153 and 167,** Drummond discloses a method wherein different diagnostic computer programs are delivered to the Monitor Agent at different times (fault messages may be selectively directed based on the nature of the fault indicated; column 28, lines 54-59).

5. Claims 32-34, 87-90, 122-127, 129, 130, and 132-140 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond in view of Cave (US 5,958,014).

Regarding claims **32, 33, 123, 124, 126, 127 and 132-135**, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider). Alternatively, the selective dispatching of fault messages to **address in the intranet** may be accomplished by appropriately configuring device server 92 (central server). Further, Drummond discloses that ATM machine may be **instructed** to access servers for purposes **of downloading documents**, which include information such as **advertising, promotional material or other types of information** (column 31, lines 28-41).

However, Drummond does not expressly disclose launching an intelligent agent program to notify the transaction terminal element as to the network identity of servicing persons potentially available for servicing of the transaction terminal element when the transaction terminal element **logs on**.

Cave teaches a system and method for establishing a data connection between a computer and **a live a gent selected from an agent pool**. Fig. 5 shows a flow chart showing the logic followed during a typical agent **log on and places the agent on the available list**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's system to notify the transaction terminal element as to the network identity of servicing persons potentially available for servicing of the transaction terminal element when an authorized service representative **logs on to** the network, as suggested by Cave. The suggestion/motivation would have been that Drummond discloses that fault messages may be configured to send an e-mail or similar message to **a selected address** whenever a particular condition exist**,** therefore, combing "notifying the transaction terminal element at the time the service representative logs on" with "directing fault messages to an address associated an entity who can provide the type of servicing" would provide an efficient and a fast method of connection between the terminal and available service representatives

Regarding claim **87-90**, Drummond discloses all the claim limitations as stated above. Further Drummond discloses fault messages, which indicate a need for servicing may be directed to an address associated with an entity who can provide the type of servicing required. Drummond does not expressly disclose that the intelligent agent program is programmed to continue to visit various servicing persons' terminal in succession until a within an allotted period of time or a specified condition has occurred.

Cave teaches, in Fig. 6, that an agent is encouraged to log off when not needed by using factors such as statistics monitoring, or time of day.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that visits various servicing persons' terminal in succession until a within an allotted period of time or a specified condition has occurred, such as suggested by

Cave, to the method of Drummond. On of ordinary sill in the art would have been motivated to do this because it provides a better customer satisfaction by improving the timeliness and predictability of servicing time.

Regarding claim **122**, Drummond discloses a method of servicing an electronic device interconnected over a network that includes storing in the device a network address of an authorized service representative, to enable notification to be sent to the service representative in the event of a designated operating condition (**fault messages which indicate a need for servicing is directed to an address associated with an entity who can provide the type of servicing required/notify appropriate personnel**; col. 28, line 46-col.29, line 5). Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. **E-mail or similar messages are sent** to a **selected address** whenever a particular condition or group of conditions exists (list of network addresses). Referring to col. 28, lines 45-67, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider).

Drummond does not expressly disclose when a servicing person's terminal logs onto the network, the log in process activates agent handler routine in the servicing person's terminal for receiving and processing intelligent agent programs launched onto the network by the transaction terminal element.

Cave teaches a system and method for establishing a real-time agent pool between computer systems. Fig. 5 shows the log on control that is exercised by a server (ACM) to effect calls on the Internet and to provide the Automatic Call Distribution function.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's system wherein a servicing person's terminal logs onto the network, the log in process activates agent handler routine in the servicing person's terminal for receiving and processing intelligent agent programs launched onto the network by the transaction terminal element, as taught by Cave. The suggestion/motivation would have been that Drummond discloses "fault or status messages are delivers to a service provider", therefore, combing the log in process with the delivering messages to the service provider would provide an efficient and a fast method of establishing a connection between the terminal and available service representatives.

Regarding claims **34, 125, 129, 130 and 138-140**, Drummond does not expressly disclose when a servicing person's terminal logs onto or off the network notify transaction terminal elements of identity of servicing persons potentially available.

Cave teaches a system and method for establishing a real-time agent pool between computer systems. Figs. 5 and 6 show the log on or off control that is exercised by a server (ACM) to effect calls on the Internet and to provide the Automatic Call Distribution function.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's system wherein a servicing person's terminal logs onto the network, notify transaction terminal elements of identity of servicing persons potentially

available, as taught by Cave. The suggestion/motivation would have been that Drummond discloses **E-mail or similar messages are sent** to a **selected address** whenever a particular condition or group of conditions exists, therefore combing the log in process with the sending messages would allow the transaction terminal elements to know which particular service provider is available.

Further, Drummond does not expressly disclose (claims 139, 140) an intelligent agent acquires a list of terminals to visit and visits the terminals in sequence.

However, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's apparatus to deliver a list of ATMs and to cause the monitor Agent to visit the ATMs on the list in sequence. The suggestion/motivation would have been that Drummond discloses pluralities of ATMs are connected to a computer system. Fig. 2 shows an ATM includes a plurality of transaction function devices 36 and device manager 68. The device manager manages the various devices 36 and controls their various states so as to be assured that they properly operate in sequence (see column 7). From each ATM, fault messages indicative of a need to replenish currency or supplies may be directed to an address in the intranet associated with an entity who can provide the type of servicing required or who has **responsibility** for replenishing supplies. This shows that a need to replenish currency or supplies may be needed at the same time, from a particular ATM or plurality of ATMs. Therefore, visiting the ATMs on the list in sequence would be beneficial to provide a communication by which the number of messages could be reduced and customer satisfaction improved.

Regarding claim **136**, Drummond discloses all the claim limitations as stated above. Further, Drummond discloses that fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. Appropriate security measures should be taken in order to avoid unauthorized access to the server handling default or device messages (column 29, lines 45-59).

Drummond does not expressly disclose launching an intelligent agent program to notify the transaction terminal element change in the network identity of servicing persons potentially available for servicing of the transaction terminal element when the servicing person's terminal logs on or off the network.

Cave teaches a system and method for establishing a real-time agent pool between computer systems. Figs. 5 and 6 show means for verifying an agent during log on, adding the verified agent to the agent pool and allowing the agent to log off.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a system that notifies the transaction terminal potentially available of servicing persons, such as that suggested by Cave, to the system of Drummond. The suggestion/motivation would have been that Drummond discloses "unauthorized access to the server handling default or device messages, appropriate security measures should be taken" therefore, notifying the transaction terminal element the identity of servicing persons during log on, would maintains security and saves time to locate service providers by being kept up-to-date about available service provider.

Regarding claim **137**, Drummond discloses all the claim limitations as stated above. Further, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider). Fault messages may be selectively directed based on the nature of the fault indicated to an address associated with an entity who can provide the type of servicing required (column 28, lines 54-62). Drummond does not expressly discloses that when a servicing person's terminal logs onto the network, establishes associated servicing details.

Cave teaches a system and method for establishing a real-time agent pool between computer systems. Figs. 5 and 6 show means for verifying an agent during log on, adding the verified agent to the agent pool and allowing the agent to log off.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a method that establishes associated servicing details when a servicing person's terminal logs onto the network, such as suggested by Cave, to the method of Drummond in order to direct fault messages to a particular service provider.

6. Claims 102, 103, 105, 111, 112, 155, 156, 159-161, 169, 170, 173-175 and 177 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond in view of Lesaint et al. (US 6,578,005).

Regarding claims **102, 103 and 105**, Drummond discloses all the claim limitations as stated above. Further, Drummond discloses **fault messages which indicate a need for servicing**

is directed to an address associated with an entity who can provide the type of servicing required/notify appropriate personnel; col. 28, line 46-col.29, line 5. Fault and status messages may be monitored from terminal at locations anywhere that are connected in the network. **E-mail or similar messages are sent** to a selected address whenever a particular condition or group of conditions exists.

Drummond does not expressly disclose that a servicing person's estimate as to when the error condition is likely to be serviced and to allow proximity or availability based prioritization for service scheduling.

Lesaint teaches a method that stores an initial schedule based on predicated availability of resources task, priorities, and suitability of tasks to resources (column 5, line 57-column 6, line 10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings from Lesaint of estimating when the error condition is likely to be serviced in the method disclosed by Drummond. One of ordinary skill in the art would have been motivated to do this because it would provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

Regarding claims **111 and 112**, Drummond discloses all the claim limitations as stated above. Further, Drummond discloses fault messages, which indicate a need for servicing may be directed to an address associated with an entity who can provide (particular servicing person's terminal; for e.g. that replenishes currency or replenishes supplies) the type of servicing required (column 28, lines 54-59). Drummond does not expressly disclose that an intelligent agent

program notifies servicing persons', where the servicing persons' terminals are scheduled to be visited by a priority list and the intelligent agent program is programmed to continue to visit various servicing persons' terminal in succession until a within an allotted period of time or a specified condition has occurred.

Lesaint teaches that a list of technicians who can do a particular task will be stored into a priority order. A scheduler attempts to schedule a task to a first technician in the list. If the task cannot be added to the end of the first technician's tour, the process is repeated for other technicians (column 13, lines 10-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a scheduling system, such as that suggested by Lesaint, to the system of Drummond. One of ordinary skill in the art would have been motivated to do this because it would provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

Regarding claims **155, 159-161, 169, 173-175 and 177**, Drummond discloses all the claim limitations as stated above. Further, Drummond discloses at and ATM, detecting an error condition (column 28, lines 35-44); examining the abilities of the human service technicians and selecting a group of technicians to handle the error condition (fault messages may be selectively directed based on the nature of the fault indicated; column 28, lines 51-55); and delivering to an alert intelligent agent addresses of the group of technicians, and causing the Alert Agent to contact the technicians (column 28, lines 51-62). However, Drummond does not expressly

disclose ranking the technicians in the group and contact the technicians in the group in rank order, until a technician is found who makes a specified response.

Lesaint teaches that a list of technicians who can do a particular task will be stored into a priority order. A scheduler attempts to schedule a task to a first technician in the list. If the task cannot be added to the end of the first technician's tour, the process is repeated for other technicians (column 13, lines 10-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a scheduling system, such as that suggested by Lesaint, to the system of Drummond. One of ordinary skill in the art would have been motivated to do this because it would provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

Regarding claims **156 and 170**, Drummond discloses a method wherein the Alert Agent, Monitor Agent, and Service Agent are all organized according to a common format (messages that are communicated through the intranet and internet are TCP/IP messages).

7. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond in view of Lesaint and Cave.

Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92). Either transaction terminal element or the central server may direct fault messages to a fault handling system (service provider). Alternatively, the selective dispatching of fault messages to **address in the intranet** may be accomplished by

appropriately configuring device server 92 (central server). Further, Drummond discloses that ATM machine may be **instructed** to access servers for purposes **of downloading documents,** which include information such as **advertising, promotional material or other types of information** (column 31, lines 28-41).

However, Drummond does not expressly disclose launching an intelligent agent program to notify the transaction terminal element as to the network identity of servicing persons potentially available for servicing of the transaction terminal element when the transaction terminal element **logs on**.

Cave teaches a system and method for establishing a data connection between a computer and **a live a gent selected from an agent pool**. Fig. 5 shows a flow chart showing the logic followed during a typical agent **log on and places the agent on the available list**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's system to notify the transaction terminal element as to the network identity of servicing persons potentially available for servicing of the transaction terminal element when an authorized service representative **logs on to** the network, as suggested by Cave. The suggestion/motivation would have been that Drummond discloses that fault messages may be configured to send an e-mail or similar message to **a selected address** whenever a particular condition exist, therefore, combing "notifying the transaction terminal element at the time the service representative logs on" with "directing fault messages to an address associated an entity who can provide the type of servicing" would provide an efficient and a fast method of connection between the terminal and available service representatives

Further, Drummond in view of Cave does not expressly disclose that a servicing person's estimate as to when the error condition is likely to be serviced and to allow proximity or availability based prioritization for service scheduling.

Lesaint teaches a method that stores an initial schedule based on predicated availability of resources task, priorities, and suitability of tasks to resources (column 5, line 57-column 6, line 10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings from Lesaint of estimating when the error condition is likely to be serviced in the method disclosed by Drummond in view of Cave. One of ordinary skill in the art would have been motivated to do this because it would provide a better customer satisfaction by improving the timeliness and predictability of servicing time.

8. Claims 119-121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drummond et al. in view of Canada et al. (US 5,870,699).

Drummond discloses all the claim limitations as stated above. Further, Drummond discloses that the transaction terminal element (64) communicates through the intranet with the central server (92) regarding the condition exist at the transaction terminal. The selective dispatching of fault messages to address in the intranet may be accomplished by appropriately configuring device server 92 (central server) (column 28, lines 35-67). Further, Drummond discloses that server is configured to receive device status messages and to produce HTTP records including HTML documents in response thereto, which provide data representative of device status to a diagnostic device 10 such as a hand held computer terminal. Drummond does

not expressly disclose that servicing requirements are determined based on prediction made by the central server.

Canada teaches that hand held data collector and analyzer systems are typically used to collect data fro machines for use in predicting maintenance requirements.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Drummond's apparatus to utilize a method where the servicing requirements is based on prediction made by the central server, as taught by Canada. The motivation is possible to obtain information for early diagnosis of impending malfunctions. Furthermore, it will prevent machine breakdowns and increase reliability

Response to Arguments

9. Applicant's arguments with respect to claims 11, 12, 32-34, 74, 81, 83-90, 95, 98-103, 105-114, 119-140, and 148-179 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST
August 10, 2005

JOHN PEZZLO
PRIMARY EXAMINER